



**RIPARIAN RECOVERY NETWORK NEWS**  
**Riparian:** wetlands adjacent to rivers or streams



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**Attracting Butterflies to Your Riparian Zone**

Ancient peoples believed butterflies were messengers from the gods. The Spanish word for butterfly is mariposa (Maria rests) - a reference to the Virgin Mary. Spiritual beings or not, almost everyone delights in watching butterflies flit about the Wimberley Valley. Beyond their apparent beauty lies an amazing lifecycle - eggs hatching into caterpillars, caterpillars increasing in size and pupating, and then butterflies emerging as mature adults. But understanding the food butterflies need to survive and reproduce is critical if your goal is to attract these fascinating beings to your very special riparian landscape. Lots of attention has been paid to milkweed - its importance for migrating Monarchs and its growing disappearance from our landscapes. But other butterflies species we love require a broad diversity of plants. And where better to find them but in already more naturally diverse riparian zones.



Before thinking about food though, it is important to remember what happens before and after these delightful creatures emerge as butterflies. Caterpillars hatch into eating machines seemingly devouring everything in sight sometimes to the dismay of those tending vegetable gardens. Just google “what caterpillar is eating my dill” and you’ll discover that, while the caterpillar pictured on the right looks similar to those of the monarch, it will become a Black Swallowtail (*Papilio polyxenes*) like the one pictured above. The dill plant was stripped before the caterpillar spun its chrysalis and emerged 1-2 weeks later. But don’t worry, the dill plant pictured quickly recovered.



After butterflies emerge, they need two kinds of food, nectar plants to sustain them throughout their short lives and host plants so they can lay eggs on or near places that will sustain the next generation. Adult butterflies access energy-rich nectar plants with a long, tubular body part called a proboscis. Most butterflies will visit a wide variety of flowers extracting a taste of nectar from each one. In riparian areas, one of their perennial favorites is also one of ours. Buttonbush attracts many different kinds of butterflies, but especially Hairstreaks, Skippers and Swallowtails. In looking for places to deposit their eggs, butterflies are more selective. After mating, female adults seek out certain specific plants on or near which they will lay their eggs. These, often very specific by butterfly species,



are plants that will sustain their offspring between the time they hatch and when they pupate. Unlike their wide-ranging parents, caterpillars plod along and eat insatiably until the time comes to spin their chrysalis. One plant becomes their total habitat and, if they fall off, they may well starve before finding their way back to a suitable host.

So, while you may still want a more formal butterfly garden close to your house, why not think of your riparian zone as a butterfly meadow or butterfly forest. Start encouraging a wide variety of vegetation designed to attract butterflies and sustain them throughout their fascinating lifecycle. That's not just about introducing a few showy flowers although those are also needed. More than 100 butterfly species choose grasses as their larval host plant and many others prefer vines, trees or shrubs. Many nectar and host plants that have been highlighted in previous issues of this newsletter including Texas Mountain Laurel (Issue 1), Frogfruit (Issue 2), Switchgrass (Issue 3), Water willow (Issue 4), Eastern gamagrass (Issue 5), Late boneset, Leavenworth's eryngo, Marsh fleabane, and American beautyberry (Issue 6), Possumhaw and Yaupon holly (Issue 9), Red buckeye, False gromwell, Lyreleaf sage, and Box elder maple (Issue 11). Quite a list. But here are a few more:



Clammyweed (*Polanisia dodecandra*) is something you might see flowering right now. This annual can grow as tall as 13 foot and blooms from May through October. It's not very inviting common name derives from the fact that most of its surface is covered by moist, sticky glands. It also has an unpleasant odor, something that defers grazing. That probably explains its survival in some of the Wimberley Valley's historical heavily grazed



riparian areas. While in wetter regions of the country Clammyweed is considered an upland (UPL) plant, in Central Texas it is rated FACU (i.e., Facultative Wetland Plant). It is the host plant for a small mostly white butterfly called the Checkered White (*Pontia protodia*) pictured above.



Lindheimer's senna (*Senna lindheimeriana*) is the host plant for a little yellow butterfly called the Orange-barred Sulphur (*Phoebis philea*). This bushy, erect perennial which grows 3 to 6 feet tall prefers dry, upland soils. But it is also an early colonizer of gravel bars so sometimes finds its way into the riparian zone. This senna is a fall bloomer but can flower earlier. A member of pea family, multiple seeds form in flat brown legumes that are about two inches long. When the pods readily detach from the plants, they can be harvested and sown in new locations to encourage a



wider spread. And those not harvested are likely to become food for birds and other wildlife.



Not all host plants are as easily recognizable as Lindheimer senna. A good example is Pennsylvania pellitory (*Parietaria pensylvanica*) which was noted in the Cypress Creek Nature Preserve during the recent plant survey. The way to confirm you've found this herb is by its distinctive smell that reminds one of a cucumber. That explains its alternate name, Pennsylvania Cucumber Plant. Pennsylvania pellitory sometimes gets a bad wrap and is described as a "weed." But without it the Red Admiral (*Vanessa atalanta*), a beautiful, regally named black butterfly with



distinctive red markings and a 3 inch wing span, wouldn't be able to find a place to nurture its offspring through the caterpillar stage.





Rattlebush (*Sesbania drummondii*) is a small shrub that develops clusters of yellow flowers. Its seeds form in long bean-like seed pods that rattle when shaken explaining one of its other names, Rattlebox. A third name, Poisonbean derives from the fact that the plant has a foul taste that can be poisonous to livestock. But don't worry - generally



cattle, sheep and goats have learned to avoid it. The good news is that means deer don't like it either. Rattlebush is the host plant for several butterfly species including the Grey Hairstreak (*Strymon melinus*) and both Wild Indigo and Funereal (pictured) Duskywings (*Erynnis baptisiae* and *Erynnis fuleralis*).



We tend to picture butterflies on conspicuous flowers. But trees and grasses often serve as host plants for the caterpillar they must be before becoming butterflies. Cedar elm (*Ulmus crassiflora*) which loves places that flood occasional is a good example. Cedar elms can grow 50 to 70 feet tall and have the smallest leaves of any trees in the elm family. You can easily recognize young trees by the corky ridges on their developing trunk. Butterflies that use Cedar elm as a host plant include the bright orange Question Mark (*Polygonia interrogationis*) pictured at the left. Two other butterflies for whom Cedar elm is the larval host are the Eastern Comma (*Polygonia comma*) and the Mourning Clock (*Nymphalis antiopa*).



Bushy bluestem (*Andropogon glomeratus*) is a great addition to the riparian winter landscape. This is one of a number of moisture-loving grasses that are host to both skippers and satyrs. Skippers are a family of fast flying butterflies with club-footed, bent antennas. By contrast Satyrs are medium sized, often drab butterflies that are rather weak flyers, often exhibiting a bobbing flight pattern. One of the latter, the Common Wood Nymph uses Bushy Bluestem as its host.



When mowing your access path, set your mower blade to the highest setting. This enables forbs butterflies love to flourish amongst the shorn grass. Texas Frogfruit (*Phyla nodiflora*) which tolerates both droughts and floods is often seen on riparian access paths. With inconspicuous white flowers, frogfruit is a nectar plant for many butterfly species and also a host plant for several. These include the White Peacock (*Anartia jatrophae*) shown in the picture on the left as well as the Common Buckeye (*Junonia coenia*) and Phaon Crescentspot (*Phyciodes phaeon*).



So, next time you take a walk through your riparian zone, observe where butterflies land. It may be a plant you've always considered a weed. Hopefully you will see that plant in a new light and appreciate it as something that provides sustenance to the butterflies you love.

The Riparian Recovery Network News is a periodic Hays County Master Naturalist publication covering topics of interest to the Wimberly Valley community. Please share this newsletter with friends and neighbors. Send any questions you might have or ideas for future topics to [riparian@haysmn.org](mailto:riparian@haysmn.org). And, if you are not currently on our mailing list, use this same address to request your name be added.

